

## STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0088765; AI 43388; PER20040001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** St. Mary Parish Water & Sewer Commission No. 5  
Four Corners Treatment Plant  
129 West Pershing Street  
New Iberia, LA 70560
- II. **PREPARED BY:** Jim Bondy
- DATE PREPARED:** February 14, 2006
- III. **PERMIT ACTION:** reissue LPDES permit LA0088765, AI 43388; PER20040001
- LPDES application received: October 22, 2004
- LPDES permit issued: March 1, 2000  
LPDES permit expired: February 28, 2005

### IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Community of Four Corners.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located at Kelly Canal and Cypremort Point Road, St. Mary Parish.
- D. The treatment facility consists of a primary settling pond and a LEMNA system. Disinfection is by chlorination.
- E. Outfall 001

Discharge Location: Latitude 29° 50' 36" North  
Longitude 91° 37' 36" West

Description: treated sanitary wastewater

Design Capacity: 0.16 GPD

Type of Flow Measurement which the facility is currently using:

Combination Flow Meter / Continuous Recorder

**V. RECEIVING WATERS:**

The discharge is into a roadside ditch; thence into Kelly Canal; thence into Stump Bayou; thence into the Intracoastal Waterway in segment 060906 of the Vermilion - Teche Basin.

The designated uses and degree of support for Segment 060906 of the Vermilion - Teche Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Full	Full	Not Supported	N/A	N/A	N/A	N/A

<sup>1/</sup>The designated uses and degree of support for Segment 060906 of the Vermilion - Teche Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 060906 of the Vermilion - Teche Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005 from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Jim Bondy  
Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

**IX.**

**PROPOSED PERMIT LIMITS:**

Subsegment 060906 of the Vermilion - Teche River Basin, is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 060906 was previously listed as impaired for suspended solids/turbidity/siltation and Carbofuran, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The *TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed* was final on May 2, 2002. As per the TMDL "Point source loads do not represent a significant source of TSS as defined in this TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors, and dischargers of organic suspended solids from point sources are already addressed by LDEQ through their permitting of point sources to maintain water quality standards for DO, the wasteload allocation for point source contributions were set to zero. This TMDL only addresses the landform contribution of TSS/sediment and does not address the insignificant point source contributions." Therefore, TSS limits will remain as in the previous permit.

The *TMDL for the Pesticide Carbofuran in the Mermentau and Vermilion-Teche River Basins* was finalized on March 21, 2002. The TMDL states that there are no known point source discharges of Carbofuran in the Mermentau Basin, and therefore no allocation was given to point sources. There is one point source in the Vermilion-Teche (FMC Corp. LA0064360) but they do not discharge Carbofuran. Likewise no allocation was given to point source discharges in the Vermilion-Teche River Basin.

**Final Effluent Limits:****OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD <sub>5</sub>	13	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy and the previous permit.
TSS	20	15 mg/l	23 mg/l	Limits are set in accordance with the <i>TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed</i> and the previous permit.

**Other Effluent Limitations:****1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**X. PREVIOUS PERMITS:**

**LPDES Permit No. LA0088765:** Issued: March 1, 2000  
 Expired: February 28, 2005

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD <sub>5</sub>	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

The permit contains pollution prevention language.

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**

**A) Inspections**

A review of the files indicates the following most recent inspection was performed by LDEQ personnel on April 19, 2004.

Findings and/or Violations -

1. Several permit limit excursions were noted.
2. Noncompliance reports for the excursions had not been submitted.

**B) Compliance and/or Administrative Orders**

A review of the files indicates that there are no recent enforcement actions administered against this facility.

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning April 1, 2004 through March 31, 2005 has revealed the following violations:

<b>Month</b>	<b>Parameter</b>	<b>DMR Reported Value</b>	<b>Permit Limit</b>
April 2004	BOD <sub>5</sub> (mass), Monthly Avg.	14 lb/day	13 lb/day
	TSS, Monthly Avg.	16 mg/l	15 mg/l
	TSS (mass), Monthly Avg.	33 lb/day	20 lb/day
May 2004	BOD <sub>5</sub> , Monthly Avg.	19 mg/l	10 mg/l
	BOD <sub>5</sub> , Weekly Avg.	29 mg/l	15 mg/l
	BOD <sub>5</sub> (mass), Monthly Avg.	51 lb/day	13 lb/day
	Fecal Coliform, Weekly Avg.	480 colonies/ml	400 colonies/ml
June 2004	BOD <sub>5</sub> , Monthly Avg.	11 mg/l	10 mg/l
	BOD <sub>5</sub> (mass), Monthly Avg.	22 lb/day	13 lb/day
	Fecal Coliform, Monthly Avg.	>1000 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	>1000 colonies/ml	400 colonies/ml
September 2004	TSS (mass), Monthly Avg.	21 lb/day	20 lb/day
October 2004	Fecal Coliform, Weekly	560 colonies/ml	400 colonies/ml

**XII. ADDITIONAL INFORMATION:**

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.16 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.16 \text{ MGD} \times 10 \text{ mg/l} = 13 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.10 and 0.50 MGD.

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
BOD <sub>5</sub>	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

**Pretreatment Requirements**

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

**XIII TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

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Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, St. Mary Parish Water & Sewer Commission No. 5, Four Corners Treatment Plant, October 22, 2004.